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NEW PYRALIDÆ AND TORTRICIDÆ FROM PALM BEACH, FLORIDA.

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Marasmia floralis, sp. nov.

Head, thorax, fore and hind wings white with brown markings as follows: the outside of the palpi, a spot on each side of the collar above, a similar but more indistinct pair on the middle of the thorax, the tips of the tegulæ, a stripe from the eye back to the wing and continued along the costa, the outer margin of all the wings narrower behind, a large costal spot concave on each side, sending one line obliquely down and in to join two parallel cross lines with pale yellow between them, and a second line down and out to similar parallel but curved lines across the outer part of the wing, a line between this and the brown outer margin with an inward bend in the middle and connected by lines to the outer margin and the line within, a few irregular lines near the base of the wing, a median band on the hind wing not reaching the costa, two cross lines between this band and the outer margin each with an inward angle in the middle connected together below where a line extends to the median band, and a series of venular dashes in the subterminal space. Expanse of wings, 12-14 mm.

Described from three examples from Florida, two in the National Museum one of which is from Palm Beach and one from Key West, and one in my own collection. One was bred from *Vincetoxicum palustre* by Dr. H. G. Dyar. Type no. 5411 U. S. National Museum.

Evergestis dyaralis, sp. nov.

Head, thorax, abdomen and fore wings smoky yellow or yellowish fuscous with a silky luster, the latter with greenish reflections. First and second segments of the labial palpi tipped with white. Upper side of antennæ, a line on each side of the face as far as the base of the antennæ, a line across the collar on each side, one on the inner edge of the tegulæ, one on the edge of the costa from the base to the end of the cell, one or two oblique streaks on the outer part of the costa, an oblique streak

at the apex with a black dot below it, and a series of terminal dashes forming a broken line, white. The ordinary lines darker but inconspicuous. The inner one forming a very obtuse outward angle at the origin of vein 2, and an equally obtuse inward angle on vein 1. The outer line is somewhat arcuate but bends inward somewhat on vein 2. The discal spot is a nearly straight oblique streak at the end of the cell. Hind wings with a silky luster, light at the base, dark fuscous outwardly. All the wings are lighter beneath than above. Expanse of wings, 21-23 mm.

Described from one specimen in the National Museum, bred from *Drypetis crocea* at Palm Beach, Florida, and two in my own collection given me by Dr. Dyar, from the same locality as the first.

I have named this beautiful species in honor of Dr. H. G. Dyar whose interesting and valuable investigations on Lepidopterous larvæ have attracted such general attention. Type no. 5410, U. S. National Museum.

Pyrausta costimaculalis, sp. nov.

Head, thorax, fore wings and upper side of abdomen, dark purplish red with a costal spot extending down to the end of the cell and in along the costa to the basal fourth, light orange yellow. Two indistinct dark lines extend nearly parallel, one from the middle of the hind margin, the other from the basal fourth up to the median vein. Hind wings fuscous. All the fringes pale yellow. Under side of the fore wings fuscous, somewhat purplish along the costa and with the costal spot much lighter beneath than above. Legs and underside of the body cream white, the outer end of the fore tibiæ dark purplish. Expanse of wings, 12-13 mm.

Described from one female specimen in the National Museum in Washington and one in my collection, bred from *Psychotria undata* by Dr. H. G. Dyar. Type no. 5412 U. S. National Museum.

Eucosma lineana, sp. nov.

Head and front of thorax dark gray, the remaining part of thorax and the hind part of the fore wings as far as the oblique band, dark fuscous. Fore wings sordid white with numerous dark longitudinal lines; costa with a series of about ten short, oblique dark brown streaks alternating with much finer ones, an oblique wood brown band marked more or less with dark brown and broken above and below the cell arises from the middle of the costa and extends to the anal angle, the costal part of this band sends out a sharp angle from its lower part, the middle part sends out an extension from below forming a v-shaped mark, the third part forms a semicircle on the upper side; a wood brown patch on the outer part of the wing with a line extending from it to near the anal angle. Fringes whitish, cut in the middle by dark brown. Hind wings fuscous with paler fringes. Expanse of wings, 16 mm.

Described from one female specimen in the National Museum, from Palm Beach, Florida, bred on *Anona laurifolia* by Dr. H. G. Dyar. Type no. 5414 U. S. National Museum.

***Epiblema perplexana*, sp. nov.**

Head and palpi clay yellow; thorax a little darker. Fore wings dark fuscous in males, much lighter in females, with a series of about five geminate, sordid white, oblique costal streaks beyond the end of the costal fold; a small dark brown spot rests on the apex; a dark brown irregularly curved streak beyond the end of the cell curves down around the outer part of the ocelloid patch which contains a few horizontal dark streaks; a median dorsal sordid yellowish white spot rests on the hind border, extends up and out terminating a little above the fold; several irregular dark streaks rest upon this spot. The remaining part of the wing is crossed by very fine streaklets. Hind wings fuscous. Expanse of wings, 13-15 mm.

Described from seven examples taken at Palm Beach, Florida, by Dr. H. G. Dyar. Type no. 5432 U. S. National Museum.

***Epiblema ochraceana*, sp. nov.**

Head, thorax and fore wings pale ochreous with darker oblique streaks along the costa and darker dots scattered over the surface of the wing except in the large anal patch in which there are only two such dots. Fringes concolorous with grayish scales along the base. Hind wings yellowish fuscous. Expanse of wings, 12 mm.

Described from one male specimen in rather poor condition in the National Museum collection from Palm Beach, Florida. Type no. 5415 U. S. National Museum.

***Lipoptycha maculana*, sp. nov.**

Head, thorax and fore wings dark fuscous, the latter with a large white spot a little beyond the middle of the hind margin and extending a little above the fold. This spot has numerous fine irregular dark streaks in it. The costa is cut by oblique black streaks followed beyond the middle by white and there are numerous oblique and horizontal yellowish streaks over the surface of the wing except at the base; terminal line around the apex black, which is represented by two or three black dots below the middle, when viewed in certain lights there are oblique bluish streaks visible, two arising near the middle of the wing and extending down to the end of the cell and one or two beyond. Hind wings fuscous, not so dark as the fore wings. Expanse of wings, $7\frac{1}{2}$ mm.

Described from one male specimen from Florida in the National Museum and one in my collection bred from *Schæffia arborescens* collected by Dr. H. G. Dyar. Type no. 5413 U. S. National Museum.

***Tortrix ivana*, sp. nov.**

Head and thorax dull ochre yellow, the latter with a dark line across the middle terminating at the tegulæ. Fore wings pale ochre yellow with a shining luster; a dark brown spot on the extreme base of the costa a little beyond which an oblique dark band extends about half way across the wing where it ends in several scattered black dots; an oblique dark band arising near the middle of the costa extends nearly to the fold beyond which it is faintly indicated by yellowish streaks, the middle of

this band across the cell is nearly of the ground color of the wing; a subapical dark patch rests on the costa in four equidistant dark brown dots; a dark spot between the end of the cell and the outer border very dark at the beginning extends obliquely down to the outer border a little above the anal angle. Ground color of fore wing with numerous cross streaks of a brighter yellowish color. Fringes concolorous with the ground color of the wing. Hind wings light gray with darker reticularions. Underside of all the wings lighter than above and faintly reproducing the markings of the upper side. Expanse of wings, 12 mm.

Described from one male specimen in the National Museum, from Florida, bred from *Iva imbricata*. Type no. 5416 U. S. National Museum.

NOTES ON SOME DIGGER BEES.—II.

BY JOHN B. SMITH, SC.D.

(PLATES III-V.)

Augochlora humeralis Patton.

The first introduction to this species came April 4, 1898, when digging out plaster casts of spider burrows. At that time Mr. Brakeley ran across occasional vertical burrows, filled at the top an inch or so, but open below that and extending down fully three feet. Beyond that they were lost and were looked upon as unusually deep old *Colletes* diggings.

April 17th, an area 18 x 16 x 23 inches was cleared of pine needles, lichens, moss and other surface débris, and about an inch and a half of sand was skived off cleanly, with a large sharp trowel. In this area 13 round holes about one-fourth of an inch in diameter were now exposed. From one of them a bee came up and was captured. It proved to be *Augochlora humeralis*, Mr. Fox and Mr. Ashmead separately determining the species for me.

Plaster was now poured into several of these holes and to Mr. Brakeley's astonishment the first opening required four fluid ounces to fill. The others required yet more, until in one case nine ounces were needed to bring the mixture to the surface.

April 18th, digging began by making a trench before the area of casts, and working down an old burrow, the trench was deepened from time to time until it was fully four feet down. In the first cast a bee was imbedded 23 inches from the top, there was a totally different